

May 14, 2013

Jim Aguila
Manager, Substance Evaluation Section
California Air Resources Board
1001 I Street
Sacramento, California 95814

Dear Mr. Aguila:

The Truck and Engine Manufacturers Association (EMA) is an international trade association that represents the interests of the world's leading manufacturers of, among others, on-highway and off-road compression ignition engines. EMA has been an active participant in CARB's regulatory process development for all engine and fuel categories, and it has been engaged with CARB throughout the renewable fuels program activity and related research into the emission influences of alternative diesel fuels.

As you are aware, EMA representatives were unable to attend the April 23, 2013, CARB Public Meeting ("Public Meeting") to discuss its draft White Paper, entitled, "Discussion of Conceptual Approach to Regulation of Alternative Diesel Fuels" (February 15, 2013) (the "White Paper"), as well as related issues regarding fuel requirements for alternative diesel fuels (ADFs), including biodiesel, renewable diesel, and other emerging diesel fuel substitutes. In response to the Staff's request, EMA provides the following comments regarding those issues.

EMA fully supports the lack of differentiation between conventional petroleum diesel fuels and diesel fuel blends containing up to B5 meeting the requirements of ASTM D975 and the California Code of Regulations Section 2281-85.

A few aspects of the White Paper raise particular concern. As identified by CARB Staff, two critical requirements for any alternative fuel include "Development of Fuel Specifications" and "Approved ADF use in Certified Engines." Based on those considerations, EMA recommends that CARB limit the scope of the ADF regulated by this proposal to biodiesel blends of B20 or less that meet the ASTM D7467 standard requirements for B6-B20 blends. As noted in the CARB Staff's Public Meeting presentation (See Slide 24), current CARB policy provides that B50+ biodiesel blends are not subject to CARB regulation. In addition, non-CARB NOx equivalent blends of B21-B98 are not legal finished fuels (See Slide 39). To date, neither the scientific literature nor CARB testing programs have uncovered any information associated with NOx equivalent blends of B21-B98. EMA requests that CARB refrain from approving any finished fuel blends greater than B20 given that there is no viable fuel specification or demonstration of acceptability regarding emission equivalence to conventional petroleum diesel fuel meeting CARB's requirements.

EMA also requests that CARB consider making the criteria for acceptance of B6 to B20 blends more stringent. Specifically, EMA recommends that CARB only approve those fuels, which are determined to be acceptable for use in CARB compliant vehicles and/or engines and to meet NOx mitigation standards. Such a demonstration has not been made for Staff's proposed additive package containing five volume percent di-tert butyl peroxide (DTBP) in B100 to be blended with compliant CARB diesel. The proposed DTBP blend level raises significant concerns regarding the differentiation between additives and blend components. Historically, additives have been defined as components added at 0.5% (5000 ppm) or lower whereas blend components have been defined as components blended at 1.0% or higher. As such, the treatment levels proposed would classify DTBP as a blend component rather than an additive. Regardless of classification – and more important – the proposed levels of DTBP have not been evaluated for use in CARB compliant vehicles or engines. While EMA supports demonstration testing as a means of determining NOx equivalency, the proposed manner of demonstration belies the significant influence of fuel properties in determining acceptable performance and durability required by both CARB regulation and California users. Engine and vehicle manufacturers are required to certify that their products will comply with California's strict emission compliance standards for their full regulatory useful life period. It is imperative that CARB recognize that those demonstrations of, and any liability associated with, compliance are based on use of CARB prescribed certification test fuels. CARB must not require manufacturers to assure compliance with the strictest global exhaust emission regulations without providing assurances that CARB ADF allowances will not jeopardize the engine/vehicle manufacturer's emission product compliance.

Similarly, EMA has questions concerning the basis for determination of a "B20-ready" CARB diesel as outlined. Very limited information is available regarding the determination of limit values as proposed by CARB and the resulting requirements associated with such a fuel's use. At best, the proposed limit values for critical fuel properties such as API gravity and cetane number appear arbitrary. Substantial efforts in the fuel industry to establish a fuel specification within ASTM for paraffinic middle distillates have not been successful; thus, EMA and its members are concerned that CARB's proposed limit values have not been derived based on broad requirements associated with viable fuels.


EMA supports CARB's efforts to promote broader use of renewable and low carbon alternatives through implementation of the Low Carbon Fuel Standard (LCFS), but only to the extent that the fuels introduced into the marketplace as a result of those efforts are compatible with the engines/vehicles using those fuels in California and are cost effective for California fuel consumers. Many, but not all, EMA member companies have approved the use of biodiesel blends up to B20 for general use. Such approvals have been based on biodiesel blend stock meeting industry standards such as ASTM D6751 blended with conventional petroleum diesel fuel meeting ASTM D975 whereby the finished fuel blend meets ASTM D7467. EMA members also have approved the use of renewable diesel, sometimes referred to as paraffinic middle distillate, which meets ASTM D975 standard requirements without specific blend level constraints.

To summarize EMA recommends:

- CARB continue to approve B5 and lower blends meeting ASTM D975 and CARB diesel fuel requirements without further requirements.
- CARB modify its policy regarding biodiesel blends to limit the scope to B6-B20 blends meeting ASTM D7467.
- CARB modify its requirements for demonstration of NOx equivalent performance to include determination of compatibility with the engines/vehicles in use in California.
- CARB modify the LCFS to require that fuels introduced into the marketplace meet industry consensus standards, such as ASTM D975 or ASTM D7467.

EMA looks forward to working with CARB Staff to develop a viable approach for determining of acceptable alternative diesel fuel formulations that meet both CARB's regulatory obligations and the needs of those Californians utilizing those fuels.

Sincerely:

A handwritten signature in black ink, appearing to read "Roger Gault", with a stylized, cursive script.

Roger Gault
Technical Director

cc: Susan Feingold Carlson
Alexander "Lex" Mitchell (CARB)
EMA Diesel Fuel Committee